

November 27, 2002

RE: D & W, Inc 039-16297-00195
TO: Interested Parties / Applicant

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure



Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

NEW SOURCE CONSTRUCTION PERMIT and MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

**D & W, Inc.
941 Oak Street
Elkhart, Indiana 46514**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 039-16297-00195	
Original signed by Paul Dubenetzky Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: November 27, 2002 Expiration Date: November 27, 2007

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary mirror coating source.

Authorized Individual: Plant Manager
Source Address: 941 Oak Street, Elkhart, Indiana 46514
Mailing Address: 941 Oak Street, Elkhart, Indiana 46514
Phone Number: 574 - 264 - 9674
SIC Code: 3231
County Location: Elkhart
County Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit
Minor Source, under PSD Rules;
Minor Source, Section 112 of the Clean Air Act

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) One (1) glass coating line, identified as GC 1, constructed in 1986, exhausting through Stack GC1, equipped with flow coating applicators, capacity: 2,400 square feet of glass per hour increasing to 3,000 square feet of glass per hour.
- (b) One (1) electric drying oven, identified as EDO 1, constructed in 1986, capacity: 2,400 square feet of glass per hour increasing to 3,000 square feet of glass per hour.
- (c) One (1) wood crating and cutting operation, identified as Wood Crating 1, constructed in 1986, equipped with a fabric filter, capacity: 600 pounds of wood per hour.
- (d) One (1) natural gas-fired boiler, identified as Boiler, constructed in 1986, exhausting through Stack SV-1, rated at 1.23 million British thermal units per hour.
- (e) Thirty (30) natural gas-fired space heaters, identified as Space 2 to Space 31, constructed in 1986, exhausting through Stacks SV-2 to SV-31, rated at 0.100 million British thermal units per hour, each.
- (f) Six (6) natural gas-fired space heaters, identified as Space 32 to Space 37, constructed in 1986, exhausting through Stacks SV-32 to SV-37, rated at 0.125 million British thermal units per hour, each.
- (g) Three (3) natural gas-fired space heaters, identified as Space 38 to Space 40, constructed in 1986, exhausting through Stacks SV-38 to SV-40, rated at 0.090 million British thermal units per hour, each.

- (h) Two (2) natural gas-fired space heaters, identified as Space 41 to Space 42, constructed in 1986, exhausting through Stacks SV-41 to SV-42, rated at 0.225 million British thermal units per hour, each.
- (i) One (1) cold cleaner degreaser, identified as Cold Cleaner, capacity: 0.0548 gallons of solvent per day.

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled, "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.5 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).
- (b) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

B.6 Permit Term [326 IAC 2-6.1-7]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications or amendments of this permit do not affect the expiration date.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of all criteria pollutants is less than two hundred fifty (250) tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to two hundred fifty (250) tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAQ prior to making the change.
- (c) Any change or modification which may increase potential to emit to ten (10) tons per year of any single hazardous air pollutant, twenty-five (25) tons per year of any combination of hazardous air pollutants, or one hundred (100) tons per year of any other regulated pollutant from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.

C.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-7]

Any change or modification which may increase potential to emit to ten (10) tons per year of any single hazardous air pollutant, twenty-five (25) tons per year of any combination of hazardous air pollutants from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.

C.3 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.4 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.5 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.6 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.7 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.8 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.9 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

Testing Requirements

C.10 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]

- (a) Compliance testing on new emissions units shall be conducted within sixty (60) days after achieving maximum production rate, but no later than one hundred eighty (180) days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two (2) weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ, within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.11 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.12 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.13 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a) (1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.14 Annual Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.15 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not

operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.17 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to:

work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) A malfunction as described in 326 IAC 1-6-2; or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required

compliance monitoring is a deviation.

- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.18 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015
- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Mirror coating line and assembly operations

- (a) One (1) glass coating line, identified as GC 1, constructed in 1986, exhausting through Stack GC1, equipped with flow coating applicators, capacity: 2,400 square feet of glass per hour increasing to 3,000 square feet of glass per hour.
- (b) One (1) electric drying oven, identified as EDO 1, constructed in 1986, capacity: 2,400 square feet of glass per hour increasing to 3,000 square feet of glass per hour.
- (c) One (1) wood crating and cutting operation, identified as Wood Crating 1, constructed in 1986, equipped with a fabric filter, capacity: 600 pounds of wood per hour.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to CP 039-3161-00195, issued on October 6, 1994 and 326 IAC 8-1-6:

- (a) The one (1) glass coating line shall utilize flow coating as the application method at all times, and
- (b) The amount of VOC delivered to the flow coating applicators including clean-up solvents shall not exceed eighty (80) tons per twelve (12) consecutive month period with compliance determined at the end of each month.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable PM emission rate from the one (1) wood crating and cutting operation shall not exceed 1.83 pounds per hour when operating at a process weight rate of 600 pounds (0.300 tons) of wood per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for the glass coating line, known as GC 1 and any control devices.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.1.4 Volatile Organic Compounds (VOCs)

Compliance with the VOC usage limitation contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

D.1.5 VOC Emissions

Compliance with Condition D.1.1 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the twelve (12) month period.

D.1.6 Particulate

In order to comply with Condition D.1.2, the fabric filter for particulate control shall be in operation at all times when the one (1) wood crating and cutting operation is in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

There are no specific Compliance Monitoring Requirements applicable to these emission units.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.7 Record Keeping Requirements

(a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.

- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
- (2) A log of the dates of use;
- (3) The cleanup solvent usage for each month;
- (4) The total VOC usage for each month; and
- (5) The weight of VOCs emitted for each compliance period.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.8 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Natural Gas Combustion

- (d) One (1) natural gas-fired boiler, identified as Boiler, constructed in 1986, exhausting through Stack SV-1, rated at 1.23 million British thermal units per hour.
- (e) Thirty (30) natural gas-fired space heaters, identified as Space 2 to Space 31, constructed in 1986, exhausting through Stacks SV-2 to SV-31, rated at 0.100 million British thermal units per hour, each.
- (f) Six (6) natural gas-fired space heaters, identified as Space 32 to Space 37, constructed in 1986, exhausting through Stacks SV-32 to SV-37, rated at 0.125 million British thermal units per hour, each.
- (g) Three (3) natural gas-fired space heaters, identified as Space 38 to Space 40, constructed in 1986, exhausting through Stacks SV-38 to SV-40, rated at 0.090 million British thermal units per hour, each.
- (h) Two (2) natural gas-fired space heaters, identified as Space 41 to Space 42, constructed in 1986, exhausting through Stacks SV-41 to SV-42, rated at 0.225 million British thermal units per hour, each.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.2.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4(a), the PM emissions from the one (1) natural gas-fired boiler constructed in 1986, rated at 1.23 million British thermal units per hour, shall not exceed 0.6 pound per million British thermal units.

Compliance Determination Requirements [326 IAC 2-1.1-11]

There are no specific Compliance Determination Requirements applicable to these emission units.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

There are no specific Compliance Monitoring Requirements applicable to these emission units.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Degreasing Operation

- (i) One (1) cold cleaner degreaser, identified as Cold Cleaner, capacity: 0.0548 gallons of solvent per day.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 326 IAC 2-6.1, WITH CONDITIONS LISTED BELOW.

Construction Conditions

General Construction Conditions

- D.3.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

D.3.2 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction of the new emission units is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

D.3.3 Affidavit of Construction

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.

(1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

(2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

- D.3.4 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications pursuant to 326 IAC 2.

Operation Conditions

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.3.5 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.3.6 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser without remote solvent reservoirs constructed after July 1, 1990, shall ensure that the following requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

COMPLIANCE DATA SECTION

Quarterly Report

Source Name: D & W, Inc.
Source Address: 941 Oak Street, Elkhart, Indiana 46514
Mailing Address: 941 Oak Street, Elkhart, Indiana 46514
Permit No.: MSOP 039-16297-00195
Facility: One (1) Glass Coating Line, known as GC 1
Pollutant: VOC
Limit: Delivered to the flow coating applicators shall not exceed eighty (80) tons per twelve (12) consecutive month period with compliance determined at the end of each month

Year: _____

Month	VOC Delivered (tons)	VOC Delivered (tons)	VOC Delivered (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES ?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100 TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. : _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ _____ AM / PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO₂, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____
INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

**Please note - This form should only be used to report malfunctions
applicable to Rule 326 IAC 1-6 and to qualify for
the exemption under 326 IAC 1-6-4.**

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

* **Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	D & W, Inc.
Address:	941 Oak Street
City:	Elkhart, Indiana 46514
Phone #:	765 - 264 - 9674
MSOP #:	039-16297-00195

I hereby certify that D & W, Inc. is ☒ still in operation.
☐ no longer in operation.

I hereby certify that D & W, Inc. is ☒ in compliance with the requirements of MSOP **039-16297-00195**.
☐ not in compliance with the requirements of MSOP **039-16297-00195**.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

Mail to: Permit Administration & Development Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

D & W, Inc.
941 Oak Street
Elkhart, Indiana 46514

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for _____.
(Title) (Company Name)
3. By virtue of my position with _____, I have personal knowledge of the
(Company Name)
representations contained in this affidavit and am authorized to make these representations on behalf of
_____.
(Company Name)
4. I hereby certify that D & W, Inc., 941 Oak Street, Elkhart, Indiana 46514, completed construction of the cold cleaner degreaser on _____ in conformity with the requirements and intent of the Construction Permit application received by the Office of Air Quality on August 14, 2002 and as permitted pursuant to **MSOP No. 039-16297, Plant ID No. 039-00195** issued on _____.
5. Additional TYPEOFFACILITY were constructed/substituted as described in the attachment to this document and were not made in accordance with the Construction Permit. (Delete this statement if it does not apply.)

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana
on this _____ day of _____, 20 _____.

My Commission expires: _____.

Signature

Name (typed or printed)

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for New Source Construction and a Minor Source Operating Permit

Source Background and Description

Source Name:	D & W, Inc.
Source Location:	941 Oak Street, Elkhart, Indiana 46514
County:	Elkhart
SIC Code:	3231
Operation Permit No.:	MSOP 039-16297-00195
Permit Reviewer:	Mark L. Kramer

The Office of Air Quality (OAQ) has reviewed an application from D & W, Inc. relating to the construction and operation of a mirror coating source.

D & W, Inc. has requested that the capacity of their permitted glass coating line be increased from 2,400 to 3,000 square feet per hour. This increase in capacity will not require any new equipment or any physical modification to the existing coating line. The existing permitted coating line was always capable of the increased capacity, but D & W, Inc. operated at 2,400 square feet per hour. In addition, D & W, Inc. requests approval to add a new degreaser.

The woodworking operations are only used to construct crates for shipping the flat glass mirrors. These woodworking operations at this mirror coating source are not used to manufacture any finished wood products.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) glass coating line, identified as GC 1, constructed in 1986, exhausting through Stack GC1, equipped with flow coating applicators, capacity: 2,400 square feet of glass per hour increasing to 3,000 square feet of glass per hour.
- (b) One (1) electric drying oven, identified as EDO 1, constructed in 1986, capacity: 2,400 square feet of glass per hour increasing to 3,000 square feet of glass per hour.
- (c) One (1) wood crating and cutting operation, identified as Wood Crating 1, constructed in 1986, equipped with a fabric filter, capacity: 600 pounds of wood per hour.
- (d) One (1) natural gas-fired boiler, identified as Boiler, constructed in 1986, exhausting through Stack SV-1, rated at 1.23 million British thermal units per hour.
- (e) Thirty (30) natural gas-fired space heaters, identified as Space 2 to Space 31, constructed in 1986, exhausting through Stacks SV-2 to SV-31, rated at 0.100 million British thermal

units per hour, each.

- (f) Six (6) natural gas-fired space heaters, identified as Space 32 to Space 37, constructed in 1986 , exhausting through Stacks SV-32 to SV-37, rated at 0.125 million British thermal units per hour, each.
- (g) Three (3) natural gas-fired space heaters, identified as Space 38 to Space 40, constructed in 1986, exhausting through Stacks SV-38 to SV-40, rated at 0.090 million British thermal units per hour, each.
- (h) Two (2) natural gas-fired space heaters, identified as Space 41 to Space 42, constructed in 1986, exhausting through Stacks SV-41 to SV-42, rated at 0.225 million British thermal units per hour, each.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following equipment:

- (i) One (1) cold cleaner degreaser, identified as Cold Cleaner, capacity: 0.0548 gallons of solvent per day.

Existing Approvals

The source has been operating under the following previous approvals including:

CP 039-3161-00195, issued on October 6, 1994.

All terms and conditions from previous approvals issued pursuant to the permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous approvals are superseded by this permit.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (inches)	Flow Rate (acfm)	Temperature (EF)
SV-1	Natural Gas-Fired Boiler	20.0	15.0	410	340
SV 2 to SV 42	Space Heaters	16.0 - 24.0	6.0 - 8.0	400 each	300
Stack GC1	Glass Coating Line	28.0	16.0	78.0	650

Enforcement Issue

Based on the potential to emit HAPs calculations on page 2 of 2 in Appendix A of the TSD for CP 039-3161-00195, issued on October 5, 1994, and as stated on page 2 of 3 in the Technical Support Document to this Construction Permit, the potential to emit a single HAP from the entire source was greater than ten (10) tons per year (xylene = 15.2 tons per year). The potential to emit a single HAP

was the only regulated pollutant that exceeded the Part 70 applicability threshold levels, i.e., the potential to emit PM₁₀, VOC, NO_x, CO and SO₂ were less than one hundred (100) tons per year. Therefore,

- (a) The source did not submit a Part 70 application by December 13, 1996, thus no operating permit was issued.

D & W, Inc. has changed the materials used for flow coating which decreased the potential to emit HAPs to less than the major source levels of ten (10) tons per year for a single HAP and twenty-five (25) tons per year for the combination of HAPs.

- (b) Hence, the source should have submitted an application for an MSOP by December 25, 1999.
- (c) Therefore, an enforcement referral has been filed. IDEM is reviewing these matters and will take appropriate action.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on August 7, 2002, with additional information received on September 9 and 20, 2002.

Emission Calculations

See pages 1 through 6 of 6 of Appendix A of this document for detailed emissions calculations.

Potential To Emit for the Entire Source at the Increased Capacity of 3,000 square feet per hour.

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	9.18
PM ₁₀	9.32
SO ₂	0.015
VOC	73.6
CO	2.10
NO _x	2.50

HAPs	Potential To Emit (tons/year)
Xylene	2.64
Ethyl Benzene	1.76
Benzene	0.00005
Dichlorobenzene	0.00003
Formaldehyde	0.002
Hexane	0.045
Toluene	0.00008
Lead Compounds	0.00001
Cadmium Compounds	0.00003
Chromium Compounds	0.00003
Manganese Compounds	0.00001
Nickel Compounds	0.0000
TOTAL	4.45

The proposed construction of a cold cleaner degreaser and an increase in the capacity of the glass coating line from 2,400 to 3,000 square feet of glass per hour has a total potential to emit of 14.8 tons of VOC per year. This increase in potential to emit represents a minor revision to MSOP pursuant to 326 IAC 2-6.1-6(g)(4)(B).

The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC are equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2000 OAQ emission data and 1999 HAPs data base.

Pollutant	Actual Emissions (tons/year)
PM	-
PM ₁₀	-
SO ₂	-
VOC	34.0
CO	-
NO _x	-
HAPs	Not Reported in 1999

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Glass Coating Line	-	-	-	Less Than 80.0	-	-	Less Than 4.80
Natural Gas Combustion	0.047	0.190	0.015	0.138	2.10	2.50	0.047
Degreasing	-	-	-	0.068	-	-	0.000
Wood Crating and Cutting Operation	1.83	1.83	-	-	-	-	-
Total Emissions	1.88	2.02	0.015	Less Than 80.2	2.09	2.50	Less Than 4.85
Part 70 (Title V) Threshold Levels	Not Applicable	100	100	100	100	100	Single 10 Total 25

The VOC emission from the glass coating line are limited to less than 80 tons per year pursuant to CP 039-3161-00195, issued on October 6, 1994 and 326 IAC 8-1-6.

This existing source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone.

Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

- (b) Elkhart County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source's total emissions from this permit MSOP 039-16297-00195, are still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than one hundred (100) tons per year,
- (b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and
- (c) any combination of HAPs is less than twenty-five (25) tons per year.

This status is based on the potential-to-emit from entire source as presented in this Technical Support Document. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) The proposed one (1) cold cleaner degreaser is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart T because the one (1) cold cleaner degreaser will not use halogenated solvents.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC in Elkhart County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983)

The one (1) natural gas-fired boiler, constructed after September 21, 1983, must comply with the requirements of 326 IAC 6-2-4. The emission limitations are based on the following equation is given in 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

The heat input capacity of the one (1) natural gas-fired boiler constructed in 1986 is 1.23 million British thermal units per hour.

$$Pt = 1.09/(1.23)^{0.26} = 1.03 \text{ pounds per million British thermal units heat input}$$

Pursuant to 326 IAC 6-2-4(a), for Q less than 10 million British thermal units per hour, Pt shall not exceed 0.6 pounds of PM per million British thermal units.

The PM emissions from the one (1) natural gas-fired boiler on page 3 of 6 of Appendix A are 0.010 tons per year or 0.002 pounds per hour or 0.0016 pounds per million British thermal units. Therefore, the one (1) boiler, constructed in 1986 complies with this rule since 0.0016 is less than 0.6 pounds of PM per million British thermal units.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

- (a) Pursuant to 326 IAC 6-3-1(b)(7), the one (1) glass coating line, known as GC1, is not subject to the requirements of 326 IAC 6-3 because the type of surface coating used in the one (1) glass coating line is flow coating.

- (b) Pursuant to 326 IAC 6-3-2(e)(3), the allowable PM emission rate from the one (1) wood crating and cutting operation shall not exceed 1.83 pounds per hour when operating at a process weight rate of 600 pounds (0.300 tons) of wood per hour.

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The potential PM emissions after controls from page 6 of 6 of Appendix A are 0.417 pounds per hour (1.83 tons per year). Therefore, the wood crating and cutting operation complies with 326 IAC 6-3-2.

The fabric filter shall be in operation at all times the one (1) wood crating and cutting operation is in operation, in order to comply with this limit.

326 IAC 8-1-6 (New Facilities General Reduction Requirements)

Pursuant to 326 IAC 8-1-6, the one (1) glass coating line, constructed in 1986, has the potential to emit VOC greater than twenty-five (25) tons per year and is not regulated by any other requirement in 326 IAC 8. Therefore, VOC emissions from the one (1) glass coating line are subject to the requirements of 326 IAC 8-1-6.

Pursuant to Condition 4 of CP 039-3161-00195, issued on October 6, 1994, the Best Available Control Technology (BACT) for the one (1) glass coating line was determined to be the utilization of flow coating as the application method at all times.

Pursuant to Condition 5 of CP 039-3161-00195, issued on October 6 1994, in order to comply with Condition 4 of the same permit and the requirements of 326 IAC 8-1-6, the amount of VOC delivered to the applicators including clean-up solvents shall not exceed eighty (80) tons per twelve (12) consecutive month period with compliance determined at the end of each month.

D & W, Inc. has reduced their potential VOC emissions from 97.5 tons per year calculated in the TSD for CP 039-3161-00195, issued on October 6, 1994 to a potential to emit VOC of 73.4 tons per year with an increased capacity of 3,000 square feet per hour. The eighty (80) tons per year VOC limit from the BACT requirements in CP 039-3161-00195, issued on October 6 1994 will be retained in this MSOP.

326 IAC 8-3-2 (Cold Cleaner Operation)

The proposed cold cleaner degreaser will be subject to the requirements of 326 IAC 8-3-2. The following requirements shall apply to the operation of the one (1) cold cleaner degreaser:

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;

- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control)

The proposed cold cleaner degreaser will be subject to the requirements of 326 IAC 8-3-5 as follows:

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser without remote solvent reservoirs constructed after July 1, 1990, shall ensure that the following requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

- (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Conclusion

The construction and operation of this mirror coating source shall be subject to the conditions of the attached proposed Minor Source Operating Permit 039-16297-00195.

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

Page 1 of 6 TSD App A

**Company Name: D & W, Inc.
Address City IN Zip: 941 Oak St. Elkhart, Indiana 46514
MSOP: 039 - 16297
Plt ID: 039 - 00195
Reviewer: Mark L. Kramer
Date: August 7, 2002**

Coating Line at 3,000 sq. ft/hr Capacity

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
D & W Blue	10.31	38.66%	0.00%	38.7%	0.00%	61.33%	0.0013	3000	3.99	3.99	15.5	373	68.1	0.00	6.50	100%
MS- 400 Silvering Solution	9.25	13.0%	0.00%	13.0%	0.00%	87.0%	0.000031	3000	1.20	1.20	0.11	2.68	0.490	0.00	1.38	100%
Butyl Acetate	7.40	100%	0.00%	100%	0.00%	0.00%	0.000005	3000	7.40	7.40	1.11	26.6	4.86	0.00	N/A	100%

PM

Control Efficiency

0.00%

State Potential Emissions

Add worst case coating to all solvents

Uncontrolled

16.8

402

73.4

0.00

Controlled

16.8

402

73.4

0.00

Change in Potential Emissions Due to the Increase in Capacity from 2,400 to 3,000 square feet per hour, a net change of 600 square feet per hour

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
D & W Blue	10.31	38.66%	0.00%	38.7%	0.00%	61.33%	0.0013	600	3.99	3.99	3.1	75	13.6	0.00	6.50	100%
MS- 400 Silvering Solution	9.25	13.0%	0.00%	13.0%	0.00%	87.0%	0.000031	600	1.20	1.20	0.02	0.54	0.098	0.00	1.38	100%
Butyl Acetate	7.40	100%	0.00%	100%	0.00%	0.00%	0.000005	600	7.40	7.40	0.22	5.3	0.97	0.00	N/A	100%

PM

Control Efficiency

0.00%

Potential to Emit

Add worst case coating to all solvents

Uncontrolled

3.4

80

14.7

0.00

Controlled

3.4

80

14.7

0.00

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lbs/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hrs/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

**Appendix A: Emission Calculations
HAP Emission Calculations**

Page 2 of 6 TSD AppA

**Company Name: D & W Inc.
Address City IN Zip: 941 Oak Street. Elkhart, Indiana 46514
MSOP: 039 - 16297
Plt ID: 039 - 00195
Reviewer: Mark L. Kramer
Date: August 7, 2002**

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Ethyl Benzene	Xylene Emissions (tons/yr)	Ethyl Benzene Emissions (tons/yr)
D & W Blue	10.3	0.0013	3000	1.50%	1.00%	2.64	1.76
MS- 400 Silvering Solution	9.25	0.00003	3000	0.00%	0.00%	0.00	0.00
Butyl Acetate	7.40	0.00005	3000	0.00%	0.00%	0.00	0.00
Individual Total						2.64	1.76
Overall Total						4.40	

METHODOLOGY

HAPs emission rate (tons/yr) = Density (lbs/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Page 3 of 6 TSD App A

Company Name: D & W, Inc.
Address City IN Zip: 941 Oak St. Elkhart, Indiana 46514
MSOP: 039 - 16297
Pit ID: 039- 16297- 00195
Reviewer: Mark L. Kramer
Date: August 7, 2002

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr		Total mmBtu/hr
4.47	39.2	30 Space Heaters rated @ 100,000 BTU/hr each	3.000
		Six Space Heaters rated @ 125,000 BTU/hr each	0.750
		Three Space Heaters rated @ 90,000 BTU/hr each	0.270
		Two Space Heaters rated @ 225,000 BTU/hr each	0.450
		Sum	4.470

	Pollutant					
Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
	1.90	7.60	0.600	100	5.50	84.0
				**see below		
Potential Emission in tons/yr	0.037	0.149	0.012	1.96	0.108	1.64

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	One Boiler	1.23
1.23	10.8		

	Pollutant					
Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
	1.90	7.60	0.600	100	5.50	84.0
				**see below		
Potential Emission in tons/yr	0.010	0.041	0.003	0.539	0.030	0.453

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

	PM*	PM10*	SO2	NOx	VOC	CO
Total Potential Emission in tons/yr	0.047	0.190	0.015	2.497	0.137	2.097

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 4 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions**

Page 4 of 6 TSD App A

**Company Name: D & W, Inc.
Address City IN Zip: 941 Oak St. Elkhart
MSOP: 039 - 16297
Pit ID: 039- 16297- 00195
Reviewer: Mark L. Kramer
Date: August 7, 2002**

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 0.002	Dichlorobenzene 0.001	Formaldehyde 0.075	Hexane 1.80	Toluene 0.003
Potential Emission in tons/yr	0.00005	0.00003	0.00187	0.04494	0.00008

HAPs - Metals

Emission Factor in lb/MMcf	Lead 0.0005	Cadmium 0.001	Chromium 0.001	Manganese 0.0004	Nickel 0.002	Total HAPs
Potential Emission in tons/yr	0.00001	0.00003	0.00003	0.00001	0.00005	0.047

Methodology is the same as page 3.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emission Calculations
Degreasing Operations
VOC and HAP Emission Calculations**

**Company Name: D & W, Inc.
Address City IN Zip: 941 Oak St. Elkhart
MSOP: 039 - 16297
Plt ID: 039 - 00195
Reviewer: Mark L. Kramer
Date: August 7, 2002**

Material	Solvent Consumption (gal/day)	Solvent density (lb/gal)	Maximum Consumption (lbs/yr)	Weight % VOC	VOC Emissions (tons/yr)	Total HAPs Emissions (tons/yr)	Solvent Used
Degreasing							
Cold Cleaner #1	0.0548	6.80	136	100%	0.068	0.00	Safety Kleen

Potential to Emit

TOTALS:	(tons/yr):	0.068	0.00
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METHODOLOGY

VOC/HAPs emission rate (tons/yr) = Material Usage (gal/day) * solvent density (lbs/gal) * Weight % VOC/HAP * 365 days/yr * 1 ton/2000 lbs

Company Name: D & W, Inc.
Address City IN Zip: 941 Oak St. Elkhart, Indiana 46514
MSOP: 039-16297
Plt ID: 039-00195
Reviewer: Mark L. Kramer
Date: August 7, 2002

Wood Crating and Cutting Operations

Actual Sawdust collected by the fabric filter is 70 pounds per week based on 2,184 hours per year with an 80% control efficiency

Therefore, actual sawdust collected per year = 70 lbs/week × 3640 lbs/year

Potential sawdust collected per year = 3640 lbs/year * 8760 hours/year / 2,184 actual hours/year = 14600 lbs/yr
 7.30 tons/yr

Potential PM emissions = Potential Sawdust Collected/ Control Efficiency

Potential PM emissions = **9.13 tons per year**

Potential PM emission after control = Potential before control x (1 - control efficiency)

Potential PM emissions after control = **1.825 tons per year**

All PM is assumed to be PM-10.

Note: There is no other valid information such as grain loading for the filter to calculate the potential to emit.

Allowable Rate of Emissions

Process Rate (lbs/hr)	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)
600	0.300	1.83

Methodology

Allowable Emissions = $4.10(\text{Process Weight Rate})^{0.67}$